

Substitute for Form 1449/PTO				Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	09/955,529	
				Filing Date	September 17, 2001	
				First Named Inventor:	Mark Peting	
				Art Unit	2631	
				Examiner Name	Not Yet Assigned	
				Attorney Docket Number	004259.P032	
Sheet	1	of	2			
U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)				
[Handwritten signature]	1	US-	4,015,238	3/29/1977	Robert Curtis Davis	AUG 13 2004 Technology Center 2600
		US-	5,027,374	6/25/1991	Mark W. Rossman	
		US-	5,291,499 A	3/1/1994	Behrens et al.	
		US-	5,295,142	3/15/1994	Izumi Hatakeyama	
		US-	5,349,608	9/20/1994	Graham, et al.	
		US-	5,608,737 A	3/4/1997	Kimura, et al.	
		US-	5,907,586	5/25/1999	Katsuragawa, et al.	
		US-	6,189,126 B1	2/13/2001	Ulmer, et al.	
		US-	6,266,687 B1	7/24/2001	Leyonhjelm, et al.	
		US-	6,301,314 B1	10/9/2001	Murayama, Jun	
		US-	6,563,889 B1	5/13/2003	Shih, et al.	
				US-		
		US-				
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FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

Sheet 2 of 2

**Complete if Known**

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First Named Inventor	Mark Peting
Art Unit	2631
Examiner Name	Unassigned
Attorney Docket Number	4259P032

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
✓		BOUCHERET/MORTENSEN/FAVARO, "Fast Convolution Filter Banks for Satellite Payloads with On-Board Processing," IEEE Journal on Selected Areas in Communications, February 1999, pp. 238-247, Vol. 17, No. 2, XP- 000851758	
✓		YIM/COAKLEY, "On-Board Processing for KA-Band Applications," February 11, 1993, pp. 225-229, University of Surrey, UK, XP 000458011	

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Based on PTO/SB/08B (08-03) as modified by Blakely, Solokoff, Taylor & Zafman (w/r) 08/11/2003.  
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				Attorney Docket Number	004259.P0300
Sheet	2	of	2		

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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
CV		BREE, ET AL., "A Bit-Serial Architecture For A VLSI Viterbi Processor", Communications Systems Research Group, University of Saskatchewan, Saskatoon, IEEE, WESCANEX '88, 1988, pages 72-77.	
CV		BIVER, ET AL., "Architectural Design and Realization Of A Single-Chip Viterbi Decoder", Elsevier Science Publishers B.V., INTEGRATION, The VLSI Journal 8 (1989), October, No. 1, Amsterdam, NL, Pages 3-16.	
CV		BREE, ET AL., "A Modular Bit-Serial Architecture For Large Constraint-Length Viterbi Decoding", Communications Systems Research Group, University of Saskatchewan, Saskatoon, Canada, IEEE International Conference on Communications", 1990, pages 1501-1506.	
CV		CHOI, ET AL., "Viterbi Detector Architecture For High-Speed Optical Storage", 1997, IEEE TENCON - Speech and Image Technologies for Computing and Telecommunications, ASIC Center Corporate Technical Operations SAMSUNG Electronics, Vol. 1, Dec 1997, pages 89-92.	
CV		W.H. YIM and F.P. COAKLEY, "On-Board Processing For KA-Band Applications", University of Surrey, UK, Publication Date, February 11, 1993., XP 000458011, pp. 225-229.	
CV		HASHIDA MITSUYOSHI, "Hierarchical Network Management System and Control Method for Network Management Information," Patent Abstracts of Japan, Publication No. 07226777	

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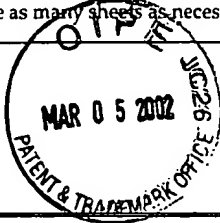
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Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary)	Attorney Docket No.: 04259.P032	Application Number: 09/955,529
	First Named Inventor: Mark Peting	
	Filing Date: September 17, 2001	RECEIVED



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Exam. Initial*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (If known)			
		6,148,043		Fujimoto	11/14/2000	
		6,141,391		Morelos-Zaragoza, et al.	10/31/2000	
		6,138,265		Morelos-Zaragoza, et al.	10/24/2000	
		6,119,265		Hara	09/12/2000	
		5,974,095		Kitaura, et al.	10/26/1999	
		6,195,642	B1	Izumi, et al.	02/27/2001	
		6,122,325		Mogre, et al.	09/19/2000	
		6,049,573		Song	04/11/2000	
		6,005,640		Strolle, et al.	12/21/1999	

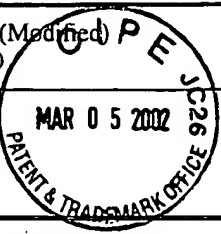
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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (If known)				

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		First Named Inventor: Mark Peting	<b>RECEIVED</b>  <b>MAR 11 2002</b>
		Filing Date: September 17, 2001	
OTHER ART - NO PATENT LITERATURE DOCUMENTS <span style="float: right;">Technology Center 2600</span>			
Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Translation <sup>2</sup>
CV		JAMES TSUI, Frequency Channelization, Digital Techniques for Wideband Receivers, Second Edition, Pages 363 - 396, 2001 Artech House, Inc., Norwood, MA	
CV		ZHENGDAO WANG and GEORGIOS B. GIANNAKIS, Wireless Multicarrier Communications where Fourier Meets Shannon, Department of ECE, University of Minnesota, Minneapolis MN., Pages 1-21	
CV		E. VERRIEST, ISEN, Implementing an Adaptive Noise Canceling System to Enhance Sonar Receiver Performance Using the TMS320C31 DSP, ESIEE, Paris, September 1996, Texas Instruments, Pages 1-24.	
CV		G.A. SHAW, R.A. FORD, J.C. ANDERSON, B.W. ZUERDNORFER, A.H. ANDERSON, RASSP Benchmark 2 Technical Description, Massachusetts Institute Of Technology Lincoln Library, 153 pages total.	
CV		"www.inventra.com/inventra/softcore/workshop/MultiRaFiltDes95/" MENTOR GRAPHICS, Hardware Design of Decimators/Interpolators, Pages 1-38.	
CV		"www.mentor.com/inventra/softcore/workshop/SDmod95/", MENTOR GRAPHICS, Introduction to AD/DA Converters, Pages 1-27.	
CV		http://www.mentor.com/inventra/softcore/workshop/SDHWDes95/ MENTOR GRAPHICS, Design of the Decimation & Interpolation Filters, Pages 1-57.	
CV		http://www.mentor.com/inventra/softcore/workshop/Applications95/, MENTOR GRAPHICS, Sigma Delta Converter Applications, Pages 1-5.	

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